ABSTRACT OF THE DISCLOSURE

Provided is an aromatic polymer phosphonic acid derivative in which a phosphonic acid derivative group is directly bound to aromatic ring. Said aromatic polymer phosphonic acid derivative can be produced by brominating a specific aromatic polymer compound with a brominating agent, then acting thereon trialkyl phosphite in the presence of a nickel halide catalyst to give a phosphonic acid di-ester, and further, by hydrolyzing the di-ester. The aromatic polymer phosphonic acid derivative is excellent in radical resistance and used for a solid polymer type fuel cell.